WHAT ARE SOME TIPS TO AVOID DROOLING?

The following are some of the tips which may help reduce drooling in Parkinson’s:

• Due to decreased spontaneous swallowing, the saliva pools in the mouth so, you have to remind yourself to swallow frequently.
• Chewing a gum helps induce the automatic swallowing reflex that is decreased in Parkinson’s.
• You will need to keep your posture straight, so your head is not tilting downwards. Therefore, you should pay attention and correct your posture frequently once you notice that it is becoming a problem.
• Additionally, you can practice keeping your lips closed when not eating or speaking.
• You should also avoid foods with excess sugar because they cause extra saliva to be produced.
• Keeping a handkerchief handy is also important.

WHAT IS RHINORRHEA?

Rhinorrhea, abnormal nasal discharge, or runny nose are seen in about 20% of patients with Parkinson’s disease. It may be more noticeable during or after eating as well as at nighttime leading to awakenings. It may cause post-nasal discharge or coughing or sneezing in many patients. Patients may feel emotionally embarrassed, leading to social withdrawal. Keeping a handkerchief handy to wipe the nose may be helpful. Some nasal sprays may also provide significant relief. If you experience Rhinorrhea, you should discuss this with your physician so that it may be treated appropriately.

DID YOU KNOW?

The number of Parkinson’s patients will double by 2031. Millions of Parkinson's patients around the world are suffering from poverty and…
• Cannot afford to buy their medications
• Cannot afford to purchase a cane, walker, or a wheelchair
• Cannot obtain educational literature about Parkinson’s in their language
• Are not able to afford consulting a neurologist and remain undiagnosed and untreated

OUR UNIQUE SERVICES

World Parkinson’s Program is the only organization which provides the following unique services to Parkinson’s patients around the world:
• Parkinson’s medications to those patients who can’t afford to buy them
• Canes, walkers & wheelchairs to prevent falls
• Parkinson’s educational brochures in many languages
• Free electronic educational newsletter
• Chapters of World Parkinson's Program in various parts of the world

JOIN THE FIGHT AGAINST PARKINSON’S

TO DONATE, VISIT PDPROGRAM.ORG

This information is not a substitute of medical advice. Consult your Physician before applying this information.

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Acknowledgments: Dr. A. Q. RANA Neurologist (Canada)
Parkinson’s disease is a progressive neurodegenerative condition characterized by tremors, slowness of movements, stiffness, and balance problems. In addition, Parkinson’s has many non-motor symptoms such as memory or cognitive issues, speech and swallowing problems, depression, and sleep difficulties. It affects almost 10 million individuals around the world.

**HOW DOES PARKINSON’S CAUSE DROOLING?**

Patients with Parkinson’s usually have reduced movements of their muscles. The muscles inside the mouth that control the throat and tongue are also affected which results in the difficulty of swallowing.

Thus, the patients with Parkinson’s are unable to impulsively swallow their saliva found normally in the mouth which results in drooling. Furthermore, patients with Parkinson’s sometimes have a posture where their head may be tilted forwards and downwards which causes the excess saliva to pool in the front part of the month, subsequently resulting in drooling.

Drooling is present in more than 75% of individuals with Parkinson's. Initially drooling may be present only at night time but later it may become a problem in the day time as well.

Drooling remains unrecognized. Some patients may attribute this problem to poorly fitting dentures. If you experience drooling, you should bring this to the attention of your physician so it can be treated.

**WHAT ARE CONSEQUENCES OF DROOLING?**

Excessive pooling of saliva in mouth may lead to the aspiration of your saliva in to the lungs resulting in pneumonia. Other consequences of drooling may include: poor dental/oral health, clothes getting wet, social withdrawal, depression, excessive treatment with medication may lead to dry mouth, which may cause dental caries.

**WHAT KIND OF MEDICATIONS CAN HELP PREVENT DROOLING?**

There are many different types of medications that can be used to help drooling. Adjusting Parkinson’s disease medications by your physician may help drooling. Most of the other medications work by decreasing the production of saliva. The following medications can be tried after consultation with your physician:

- Amitriptyline is an antidepressant and causes dry mouth as side effect.
- Trihexyphenidyl is an anticholinergic medication and causes dry mouth as a side effect.
- Atropine drops are instilled in the mouth few times daily and also help reduce drooling.
- Scopolamine Patch is usually applied behind the ear and helps to decrease drooling.
- Botulinum toxin is a neurotoxin, which can help decrease drooling. It is injected into salivary glands which produce saliva. Botulinum toxin reduces the amount of saliva produced by the salivary glands and consequently decreases the amount of drooling.

The majority of the saliva in our body is produced by two glands. These are parotid glands and the submandibular glands. The latter glands yield a much larger amount of saliva. The treatment with botulinum toxin is more effective when both types of glands are injected.

Effect of botulinum toxin treatment also depends on the degree of drooling. Usually, the benefits of the treatment are more pronounced when the amount of drooling is small. As the frequency of drooling increases, the effectiveness of the treatment decreases.

The dosage of the botulinum toxin can be adjusted depending on your condition. Botulinum treatment is temporary, and the effect of this treatment lasts for three to four months after which the injections have to be repeated.

Botulinum treatment may also cause some side effects including excessive dryness of the mouth, increased difficulties in swallowing and pain at the site of the injection during the treatment. Furthermore, a long term decrease in the amount of saliva in the mouth may cause dental caries. Thus, periodic examinations by a dentist are necessary if a long term treatment is required.

There are several steps that can be taken in order to reduce these side effects. Initially, the treatment should begin with a lower dosage and should be applied to the parotid glands only since they produce less saliva. If the drooling does not improve, a higher dosage can be used. In refractory cases surgical treatments such as salivary gland duct ligation, relocation, neurectomy or removal of the gland may be required.